

dorsally occupying less than 0·2 the total length of the head. Postocular bristles long, colourless. Ocelli present, well forward. Antennæ twice as long as the head; relative lengths of joints 3 to 8 approximately as follows:—51 : 50 : 43 : 42 : 36 : 24. Joint 4 broader than 3 or 5; 3 claviform, 4 claviform; 5 subclavate, stemmed; 6 also stemmed, and 7 constricted at extreme base to a very short stem. Sense-cones stout, rather blunt.

Pronotum transverse, a little more than twice as broad as long. All setæ present, practically colourless and therefore inconspicuous; those at posterior angles the longest, the outer and inner being 0·55 and 0·45 the length of the pronotum respectively; mid-lateral pair short and the pair at anterior angles about 0·25 the length. Fore-femora slightly incrassate and fore-tarsus toothed. Pterothorax not as broad as the width across the fore-coxæ, about 0·75 as long as broad.

Abdomen slightly broader than the pterothorax; roundly narrowed apically, bristles moderately long, colourless, and inconspicuous. Tube about 0·75 the length of the head; 2·25 times as broad at base as at apex, sides straight and evenly narrowed. Apical hairs weak, short, about 0·5 the length of the tube.

*Type.* In Coll. Bagnall, University Museum, Oxford.

*Hab.* AUSTRALIA, F. T. Gulley, 27. 10. 13 (*F. Spry*).

This is the only data at my disposal.

## XXVI.—*New Species and Forms in the Joicey Collection.*

By LOUIS B. PROUT.

Fam. Geometridæ.

Subfam. *ENOCHROMINÆ*.

### 1. *Cartaletis gracilis landbecki*, subsp. n.

Like *gracilis variegata*, Prout (Nov. Zool. xxiii. p. 274), in the extension of the fulvous markings, but distinguished by having these of the pale shade of *forbesi*, Druce, whereas in *g. variegata* they are of the warm reddish shade of *sapor*, Druce, or of *Paratyphodes tenuis*, Butl. The most constant

point of distinction between *g. gracilis* and its more southerly races is the *absence of black costal dusting* on the proximal part of the fore wing in the latter; in *g. gracilis* the costa is black or blackish to the base. Except at the base and on the hind wing *g. landbecki* is individually very variable; the pale fulvous shade may disappear before one-third of the costa, and not reappear, or it may reappear as an isolated spot in the region of the distant arcole, or with a large spot at base of veins  $R^3-M^1$ , or it may run broadly to beyond middle of costa, becoming confluent with the last-named spots (name-type), and there may even be a further extension of the outer spots into an irregular band proximal to the black border and reaching  $SM^2$ .

Upper Kasai District, Congo Free State (*P. Landbecki*); 7 ♂♂ in coll. Joicey.

It may be pointed out that *landbecki*, Druce (Ann. & Mag. Nat. Hist. (8) vi. p. 400), wrongly described as an *Aletis*, and cited there by me in Lep. Cat. viii. p. 79, is a *Mimaletis* (subfamily Geometrinæ), so that there is no fear of collision in the use of this subspecific name.

#### Subfam. HEMITHEINÆ.

#### 2. *Thalassodes clarifimbria*, sp. n.

♀. —42-49 mm.

Face reddish brown. Palpus somewhat more reddish, beneath yellow-white; third joint relatively short, about half as long as second. Vertex and antennal shaft white; occiput green; thorax and abdomen green above, unmarked; beneath white to whitish.

*Fore wing* green, rather duller and bluer than in *semihyalina*, Walk., the white strigulation rather strong; costal edge yellow at extremity, then whitish; lines white, rather faint, obsolete costally; antemedian placed as in the allies; postmedian rather far from termen anteriorly, reaching hind margin at two-thirds; fringe almost white.

*Hind wing* with termen more feebly bent at  $R^3$  than in the allies, excepting perhaps *semihyalina*; concolorous with fore wing, the elongate cell-mark and the postmedian line both present, but rather indistinct.

*Underside* paler green, almost unmarked; fore wing with costal edge pale yellow; both wings with fringe whitish.

Ceylon: Maskeliya, Aug. 1905 (type) and June (*G. C. Alston*), in coll. Joicey; Hakgale, April 1907 (*E. E. Green*), in coll. Brit. Mus.; the latter yellower green, perhaps faded.

Distinguishable from the allies by the whiter fringes and

browner face; also (except from *semihyalina*, which has a white dorsal line and is, especially in Ceylon, much smaller) by the shape. Assuming that the ♂ has non-dilated hind tibia, the natural position will be next to the last-named species.

Subfam. *STERRHINÆ*.

3. *Scopula linearis*, f. *alstoni*, form. n.

♂ ♀.—Differs from name-typical *linearis*, Hmps. (Ill. Het. Brit. Mus. viii. p. 123), in that the incurved portions of the postmedian line (between the radials and behind M<sup>2</sup>—both here conspicuously blackened) are followed distally by dark patches (ochreous irrorated with black, especially at their distal extremity) about as in *stigmata*, Moore, or some forms of *walkeri*, Butl.

Ceylon: Uva, 500 feet, May (*G. C. Alston*), a pair in coll. Joicey; also a poor ♂ from Pundaloya (*E. E. Green*), in coll. Brit. Mus.

I have not seen the *linearis* form from Ceylon, so that this may well prove a constant race, or even representative species, as I at first thought the hind tibia appeared still thicker; but the known variability of some species of the group in respect of the postmedian blotches makes me hesitate until more material is available. Name-typical *linearis* is fairly frequent in the Nilgiri and Palni Hills, and occurs also in Sikkim and Bhutan; from none of these localities have I seen specimens approaching the *alstoni* form.

4. *Scopula subpartita*, sp. n.

♂.—26–28 mm.

Face brown-black, narrowly whitish below. Palpus black above, ochreous whitish beneath. Vertex and antennal shaft light ochreous brown; collar darker; antennal joints slightly projecting, ciliation nearly twice as long as diameter of shaft. Thorax and abdomen light ochreous brown, more whitish beneath; abdomen dorsally with some black irroration and ill-defined medio-dorsal spots. Fore leg and (more slightly) mid leg infuscated on upper and inner side; hind tibia rather long, dilated, fringed above and with rather long whitish hair-pencil; hind tarsus nearly one-third as long as tibia.

*Fore wing* moderately broad, costa gently arched posteriorly, termen smooth, little curved; light ochreous brown, appearing slightly darker and rougher than in most of the *nesciaria* group, on account of slight greyish suffusions and

moderate blackish irroration; cell-dot black; markings grey; antemedian line ill-defined, strongly angled in cell, strongly oblique posteriorly, marked with slight shades on M and SM<sup>2</sup>; median shade rather thick, strongly oblique from middle of hind margin to R<sup>1</sup>, vertical to SC<sup>5</sup>, then oblique inward but indistinct; this shade very slightly incurved between SM<sup>2</sup> and M<sup>1</sup> and between the radials, feebly dentate outwards on M<sup>2</sup>, M<sup>1</sup>, and R<sup>3</sup>; postmedian fine, lunulate-dentate, formed about as in the allies, accentuated by small dark dashes on the veins; subterminal pale grey shades moderately developed, leaving the clear rather broad subterminal tolerably distinct, formed of a series of lunules which are in part almost separated by very fine darkening of the veins; terminal black spots small but sharp; fringe in proximal half concolorous, with some black irroration (especially distally), in distal half paler, almost clear.

*Hind wing* with termen convex, rather full about the middle, but with the bend at R<sup>3</sup> inappreciable; proximally rather paler than fore wing, and without antemedian line, otherwise with the markings continued, the median shade straight or nearly so, proximal to the cell-dot, the postmedian thicker than on fore wing, with the vein-dashes weaker.

*Underside* paler, the fore wing, except at hind margin, with strong brownish-smoky suffusions from base to median shade; minute black cell-dots present; postmedian line of fore wing nearly as above, of hind wing fine and faint; subterminal shades slight; terminal dots present; fringes concolorous, not irrorated.

Khasis (native collector), type in coll. Joicey. Other examples merely labelled "Assam."

Distinguishable from *attentata*, *patularia*, etc., by the less short tarsus, spotted abdomen, sharply defined dark proximal area of fore wing beneath, and by the tone of colour. Females from the same source as the paratypes, and agreeing exactly in the last respect, fail, however, of the other distinctive characters, and have also slightly narrower wings, the termen of the hind wing rather less convex, more recalling the African *khakiata*, Warr., and can for the present only be cited here with a query.

##### 5. *Scopula segregata*, sp. n.

♂.—23-25 mm.

Face black. Palpus brown, mixed with black above and becoming pale beneath. Vertex white. Antenna ciliate

(broken in both examples). Collar brown. Thorax above pale brown; abdomen whitish. Hind tibia slender, with long thin hair-pencil, spurs wanting; tarsus as long as tibia.

*Fore wing* with costa very gently arched, apex acute, termen oblique, straight anteriorly, very slightly curved posteriorly; pale brown, with a tinge of fleshy-ochreous and with minute olive-grey irroration; cell-dot minute, black; antemedian line obsolete; median shade rather thick, grey, strongly oblique and straight from just beyond middle of hind margin to  $R^1$  or  $SC^5$  midway between cell-dot and termen, then less oblique and much fainter; postmedian line fine, parallel and approximated to median; subterminal shades rather weaker and rather less oblique; terminal line very fine, continuous, scarcely thickened between the veins; fringe concolorous or slightly more reddish, unmarked.

*Hind wing* not broad, costal margin relatively long; whiter than fore wing, especially proximally and costally; irroration strongest in abdominal region; cell-dot minute, black; median shade faint, only traceable in abdominal region; postmedian and two subterminals fine, weak, fleshy-greyish, nearly parallel with termen, apparently (at least the postmedian) finely crenulate; terminal line and fringe nearly as in fore wing.

Fore wing beneath with ill-defined smoky suffusions as far as the median shade, hind wing rather more uniformly coloured than above; both wings with markings nearly as on upperside, hind wing with terminal blackish dots.

Teng-yueh-ting, W. China; 2 ♂♂ in coll. Joicey.

Very distinct from any Indo-Australian *Scopula* known to me; more associated with the African group *silonaria*, Guen., *commaria*, Swinh., *fragilis*, Warr., etc.

#### 6. *Scopula petula*, sp. n.

♂ ♀.—31-33 mm.

Coloration and aspect of *napariata*, Guen., or slightly warmer in tone. Antenna of ♂ with the fascicles of cilia considerably longer. Hind tarsus of ♂ considerably longer (at least  $\frac{2}{3}$  as long as tibia).

*Fore wing* with termen more oblique, as long as hind margin; cell-dot subobsolete or sharply black, but in any case placed on the posterior extremity of  $DC^3$ ; postmedian line at its costal extremity rather more displaced proximally, here somewhat thickened but vague; terminal dots rather large and sharp.

*Hind wing* with terminal dots rather large and sharp.

*Underside* similar to that of *napariata*, fore wing rather more suffused.

Sierra del Libano, Dept. Magdalena, Colombia, 6000 feet (*H. H. Smith*); type ♂ and three ♀ ♀ in coll. Joicey.

7. *Scopula toxophora*, sp. n.

♀.—25 mm.

Nearest to *habilis*, Warr. (Nov. Zool. vi. p. 31). Body and wings above and beneath much more ochreous.

*Fore wing* with antemedian line curved in cell, not (as in *habilis*) angulated; postmedian slightly less oblique, anteriorly (about R<sup>1</sup>) forming a much stronger outward curve than in *habilis*; cell-dot obsolete.

*Hind wing* with termen not appreciably elbowed; cell-dot obsolete.

Fore wing beneath rather glossy, proximally somewhat suffused with rosy grey; antemedian line and cell-dot obsolete, postmedian line feeble, obsolete anteriorly; hind wing unmarked; both wings with terminal line rather weaker than above.

Bitje, Ja River, Cameroons, 2000 feet, Oct.–Nov. 1912 (*G. L. Bates*); type in coll. Joicey.

XXVII.—Notes on the Genus *Cricetomys*, with Descriptions of Four new Forms. By MARTIN A. C. HINTON.

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IN determining some specimens of *Cricetomys* from Zanzibar and the southern part of the Congo Basin, I have had occasion to work through all the material in the British Museum. This material, although extensive, is scarcely sufficient for an attempt to revise the whole genus. Many forms have been described, but with one exception all have been treated as mere subspecies of *C. gambianus* by modern workers—in my opinion, four species at least are at present included under the name.

1. *Cricetomys gambianus*, Waterhouse.

An examination of Waterhouse's type shows that the name *gambianus* is applicable only to the harsh-furred white-bellied forms ranging eastwards from the Gambia and